

IN THE  
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Ludmila Cherkasova, et al.

Confirmation No.:

Application No.: 10/601,992

Examiner:

Filing Date: June 23, 2003

Group Art Unit:

Title: COST-AWARE ADMISSION CONTROL FOR STREAMING MEDIA SERVER

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

This Information Disclosure Statement is submitted:

- ☒ under 37 CFR 1.97(b), or  
(Within three months of filing national application; or date of entry of national application; or before mailing date of first office action on the merits; whichever occurs last)
- ☐ under 37 CFR 1.97 (c) together with either a:  
☐ Statement under 37 CFR 1.97(e), or  
☐ a \$180.00 fee under 37 CFR 1.17(p), or  
(After the CFR 1.97 (b) time period, but before final action or notice of allowance, whichever occurs first)
- ☐ under 37 CFR 1.97 (d) together with a:  
☐ Statement under 37 CFR 1.97(e)(1) or (2), and  
☐ a \$180.00 fee set forth in 37 CFR 1.17(p).  
(Filed after final action, a notice of allowance, on or before payment of the issue fee)

Please charge to Deposit Account **08-2025** the sum of \$0.00. At any time during the pendency of this application, please charge any fees required or credit any overpayment to Deposit Account **08-2025** pursuant to 37 CFR 1.25.

☒ Applicant(s) submit herewith Form PTO 1449 - Information Disclosure Citation together with copies, of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe(s) may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.56.

☐ A concise explanation of the relevance of foreign language patents, foreign language publications and other foreign language information listed on PTO Form 1449, as presently understood by the individuals(s) designated in 37 CFR 1.56 (c) most knowledgeable about the content is given on the attached sheet, or where a foreign language patent is cited in a search report or other action by a foreign patent office in a counterpart foreign application, an English language version of the search report or action which indicates the degree of relevance found by the foreign office is listed on form PTO 1449 and is enclosed herewith.

It is requested that the information disclosed herein be made of record in this application.

- ☒ I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Alexandria, VA 22313-1450. Date of Deposit: Sept. 26, 2003  
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- ☐ I hereby certify that this paper is being transmitted to the Patent and Trademark Office facsimile number \_\_\_\_\_ on \_\_\_\_\_  
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Typed Name: John Pallivathukal

Signature: [Signature]

Respectfully submitted,

Ludmila Cherkasova, et al.

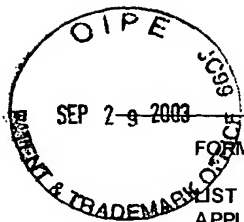
By [Signature]

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Reg. No. **44,034**

Date: **Sep. 26, 2003**

Telephone No.: **(214) 855-8007**



## PATENT APPLICATION

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FORM PTO-1449

LIST OF PATENTS AND PUBLICATIONS FOR  
APPLICANT'S INFORMATION DISCLOSURE  
STATEMENT

(Use several sheets if necessary)

ATTY. DOCKET NO.

200311046-1

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10/601,992

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APPLICANT

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GROUP

## REFERENCE DESIGNATION

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	PUBLICATION DATE	NAME	Pages, Columns, Lines Where Relevant Passages or Figures Appear
	1A	5,732,239	03-24-1998	Tobagi et al.	
	1B	5,734,119	03-31-1998	France et al.	
	1C	5,815,662	09-29-1998	Ong	
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	1E	6,178,480 B1	01-23-2001	Tobagi et al.	
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	1G	6,466,980 B1	10-15-2002	Lumelsky et al.	
	1H	2002/0083124	06-27-2002	Knox et al.	
	1I	2002/0091722	07-11-2002	Gupta et al.	
	1J	2002/0129048	09-12-2002	Qiu et al.	
	1K	2002/0150102	10-17-2002	Janko et al.	

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	PUBLICATION DATE	NAME OF PATENTEE OR APPLICANT	Pages/Columns/Lines Where Relevant Passages/Figures Appear	Check if Translation attached
	1L					
	1M					
	1N					
	1O					
	1P					

## OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

1Q	CHASE, J. et al., "Managing Energy and Server Resources in Hosting Centers," Dept. of Computer Science, Duke University, 14 pages
1R	EAGER, D. et al., "Optimal and Efficient Merging Schedules for Video-on-Demand Servers," Proc. ACM Multimedia 1999, 4 pages
1S	NAHRSTEDT, K. et al., "A Probe-based Algorithm for QoS Specification and Adaptation," Univ. of Illinois at Urbana Champaign, pages 1 - 12

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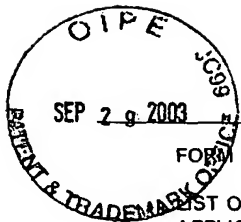
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2Q	NAHRSTEDT, K. et al., "QoS-Aware Resource Managment for Distributed Multimedia Applications," Univ. of Illinois at Urbana Champaign, Dept. of Computer Science, pages 1-37
2R	RANJAN, S. et al., "QoS-Driven Server Migration for Internet Data Centers," Proc. of IWQoS 2002, 10 pages
2S	SHENOY, P. et al., "Middleware versus Native OS Support: Architectural Considerations for Supporting Multimedia Applications," Univ. of Massachusetts, Dept. of Computer Science, 10 pages

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## PATENT APPLICATION

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## OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

3Q	CHERKOSOVA, L. et al., "Building a Performance Model of Streaming Media Applications in Utility Data Center Environment," Hewlett-Packard Laboratories, Internet Systems and Storage Lab, 12 pages
3R	ACHARYA, S. et al., "Characterizing User Access To Videos On The World Wide Web," Part of the IS&T/SPIE Conference on Multimedia computing and Networking 2000, SPIE Vol. 3969, 2000, pages 130-141
3S	ALMEIDA, J. et al., "Analysis of Educational Media Server Workloads," Proc. 11th Int'l. Workshop, 2001, 10 pages

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	4M				
	4N				
	4O				
	4P				

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4Q	DAN, A. et al., "Buffering and Caching in Large-Scale Video Servers," IEEE 1995, pgs 217-224
4R	KIM, I. et al., "VBR Video Data Scheduling using Window-Based Prefetching," IEEE 1999, pgs 159-164
4S	CHERKASOVA, L. et al., "Characterizing Locality, Evolution, and Life span of Accesses in Enterprise Media Server Workloads," NOSSDAV '02, May 12-14, 2002, 10 pages

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